

AMENDMENTS TO THE CLAIMS

Claims 1-3 (Cancelled)

4. (Currently Amended) ~~The method of manufacturing a semiconductor device according to claim 2~~ A method of manufacturing a semiconductor device including a plurality of processing processes, the method comprising:

a first step of acquiring a measurement value pertaining to a wafer to be subjected to a predetermined processing process;

a second step of determining processing requirements for the predetermined processing process on the basis of the measurement value; and

a third step of performing the predetermined processing process in accordance with the processing requirements determined in the second step, wherein the predetermined processing is etching of a predetermined film to be processed, and the predetermined measurement value is a value expressing a physical quantity of the film to be processed,

wherein the film to be processed is a silicon oxide film including impurities, and the measurement value is the concentration of impurities contained in the silicon oxide film.

5. (Currently Amended) ~~The method of manufacturing a semiconductor device according to claim 2~~ A method of manufacturing a semiconductor device including a plurality of processing processes, the method comprising:

a first step of acquiring a measurement value pertaining to a wafer to be subjected to a predetermined processing process;

a second step of determining processing requirements for the predetermined processing process on the basis of the measurement value; and

a third step of performing the predetermined processing process in accordance with the processing requirements determined in the second step,

wherein the predetermined processing is etching of a predetermined film to be processed, and the predetermined measurement value is a value expressing a physical quantity of the film to be processed,

wherein the measurement value is the refractive index of the film to be processed.

6. (Currently Amended) A The method of manufacturing a semiconductor device according to claim 2, including a plurality of processing processes, the method comprising the steps of:

dry etching a predetermined film to be processed;

wet etching, after said step of dry etching, the predetermined film to be processed;

acquiring, after said step of dry etching, the dimension of the film to be processed;

determining processing requirements for said step of wet etching on the basis of the dimension of the film to be processed; and

wherein the measurement value is the dimension of the film to be processed said step of wet etching is performed in accordance with the processing requirements.

7. (Currently Amended) The method of manufacturing a semiconductor device according to claim 4, wherein the first step comprises a sub-step in which a measurement apparatus disposed in a manufacturing line acquires the predetermined measurement value;

the second step includes a sub-step in which the measurement apparatus transmits the predetermined measurement value to a main computer disposed in the manufacturing line, and a sub-step in which the main computer determines the processing requirements on the basis of the measurement value by reference to a processing recipe stored in the main computer in advance; and

the third step includes a sub-step in which the main computer transmits the processing requirements determined in the second step to a processing apparatus disposed in the manufacturing line, and a sub-step in which the processing apparatus performs the predetermined processing process in accordance with the processing requirements.

8. (Currently Amended) The method of manufacturing a semiconductor device according to claim 4, wherein the first step comprises a sub-step in which a measurement apparatus disposed in a manufacturing line acquires the predetermined measurement value;

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the second step includes a sub-step in which the measurement apparatus transmits the predetermined measurement value to a main computer disposed in the manufacturing line, a sub-step in which the main computer transmits an instruction signal determined on the basis of the measurement value to a processing apparatus disposed in the manufacturing line, and a sub-step in which the processing apparatus determines the processing requirements on the basis of the measurement value by reference to a processing recipe stored in the main computer in advance; and

the third step includes a sub-step in which the processing apparatus performs the predetermined processing process in accordance with the processing requirements determined in the second step.

9. (Currently Amended) ~~The method of manufacturing a semiconductor device according to claim 1~~ A method of manufacturing a semiconductor device including a plurality of processing processes, the method comprising:

a first step of acquiring a measurement value pertaining to a wafer to be subjected to a predetermined processing process;

a second step of determining processing requirements for the predetermined processing process on the basis of the measurement value; and

a third step of performing the predetermined processing process in accordance with the processing requirements determined in the second step, wherein:

the predetermined processing is wet etching of a predetermined film to be processed;

the predetermined measurement value is a value expressing the physical quantity of the film to be processed;

the method further comprises a fourth step of counting a time which has elapsed since replacement of a chemical to be used for the wet etching;

in the second step, wet-etching processing requirements are determined on the basis of the measurement value and the elapsed time; and

in the third step, wet etching of the film is performed in accordance with the wet-etching processing requirements.

10. (Original) A method of manufacturing a semiconductor device, comprising the steps of:

wet etching a predetermined film to be processed;

counting a time which has elapsed since replacement of a chemical to be used for the wet etching; and

determining processing requirements for the wet etching on the basis of the elapsed time; wherein said wet etching is performed in accordance with the processing requirements.

Agreed

Claims 11-19 (Withdrawn)

